

# MAINE FARMER

## AND JOURNAL OF THE USEFUL ARTS.

BY WILLIAM NOYES & CO.]

"Our Home, Our Country, and Our Brother Man."

[E. HOLMES, Editor.]

Vol. IV.

Winthrop, (Maine,) Friday, February 26, 1836.

No. 4.

### The Maine Farmer

IS ISSUED EVERY FRIDAY MORNING.

TERMS.—Price \$2 per annum if paid in advance \$2.50 if payment is delayed beyond the year.

No paper will be discontinued at any time, without payment of all arrearages and for the volume which shall then have been commenced, unless at the pleasure of the publishers.

All money sent or letters on business must be directed, *post paid*, to Wm. Noyes & Co.

### THE FARMER.

WINTHROP, FRIDAY MORNING, FEB. 26, 1836.

#### Chemistry for Farmers.—No. 11.

CARBONIC ACID GAS — THEORY OF RESPIRATION —  
USE OF THIS GAS TO VEGETATION — CARBON,  
DIAMOND.

In our last, we proposed to explain why it was that the air which we inspired, or drew into our lungs, must be free from *carbonic acid*, and the same air when expired, or thrown out, should be loaded with carbonic acid gas, and unfit to breathe again. In order to understand this, we must leave Chemistry for a little time, and examine the structure of the human system, or Physiology, as it is sometimes called. The food which we eat, you probably know, contains more or less Carbon, for if you should take a piece of bread, and burn it under cover, or out of contact of the air, it forms a piece of coal, or charcoal; so also of a piece of meat. These substances of course are made up of some other materials, besides the carbon which renders them palatable, and digestible. They are taken into the stomach, digested, and a portion of them taken up by the absorbents, and little vessels of the digestive organs, & collected into a vessel or tube, through which it is conveyed into a certain vein, and there mingled with the blood. It is then carried by this vein into the top of the right side of the heart, where it is poured into a cavity, called in technical language, the *Auricle*, probably because it has a rude or distant resemblance to an ear, and is the same which is called by butchers, the "*deaf-ear*." From this cavity, it is by the contraction of the heart, pushed into another cavity just below, on the same side of the heart—from this, it is again pushed, into the lungs. Now the lungs, as you probably know, are a couple of spongy bodies, made up of little cells, and little veins and arteries into which last, the blood, loaded with the Carbon of the food, and also the Carbon from other sources, is forced by the heart.

This Carbon you all know, perhaps, give the dark color to the blood in the veins, or the venous blood. Now the air which we take into the lungs, is received into the little cells before mentioned, and kept from mingling with the blood only by means of a delicate, thin membrane, or film between them, and although it prevents their coming actually together, yet an action goes on between them like this. The oxygen of the air which we took in, combines with the carbon of the blood, and it thereby changes it from a kind of solid matter floating in the blood, to a gas, namely, the *Carbonic acid Gas*, ex-

actly similar to that which was formed, when you burned the Charcoal in a jar of oxygen. Being thus changed, it is thrown out of the lungs, and hence the reason why the breath which has been into the lungs once or twice, becomes unfit for breathing again, and will not support life.—Hence the reason why people become suffocated, or stifled, as it is familiarly called, when shut up in a tight box, or in a limited supply of air. The oxygen of the air, by successive breathings, becomes combined with the carbon of the blood, and every particle being combined, and thus changed to carbonic acid gas, can no longer relieve the blood of its carbon, and thereby becomes useless. But what is the course of the blood, after being relieved of its carbon by the oxygen? After the carbon of the blood has combined with the oxygen taken into the lungs, becomes changed to a gas, and is thrown out the blood is no longer dark, but of a scarlet red color. It is then taken up by numerous little arteries, and finally carried back in this state, to the top of the left side of the heart, or "*left Auricle*" or "*deaf-ear*." From this it is thrown into the lower cavity of the left side of the heart, called the "*left ventricle*." From this cavity it is thrown into the arteries of the body, and passes all over the system, and as it passes along, the little vessels called absorbents, in this part, and in that part, takes up portions of it to make this or that portion of the body—and in the mean time, much carbon which is not wanted is probably thrown out by other small vessels into the blood, and by the time the blood has gone to the ends of the arteries, it has lost its red color, and becomes dark in consequence. The veins then take it up, and carry it back to the right side of the heart as before mentioned, and thence into the lungs again, to be unloaded of its carbon, as we have above stated. But suppose that it does not here meet with the pure oxygen of the breath, how is death produced thereby? Indeed all that we can tell you is, that it seems to be a law of Nature, that this carbon must be thrown off; for if it is not, and the blood thus loaded passes on to the left side of the heart, and thence to the brain, death ensues, for the brain loses its action, or rather its sensibility, when supplied with this venous or black blood, and the delicate machinery of life ceases its motion. So much for the *theory* of respiration, and the part that oxygen and carbon play in keeping us alive and active.

It is true we have strayed a little from the prescribed rules of chemical science, or at least have not been so systematic as some *grave* authors may be; but perhaps it is best to give some detail of the uses of a thing or an element, as soon as you have learned the distinguishing properties of it.

The question may next very naturally arise, if every animal which breathes, and every fire that burns produces a certain quantity of carbonic acid, this quantity is thrown into the atmosphere at every moment.—How comes it that the atmosphere is not filled with it, and the animal world become extinct for want of pure oxygen?

A beneficent Deity has not allowed an evil of this kind to take place, without a corresponding rem-

edy. Indeed the formation of this gas, besides the relief it affords us by being formed and thrown out of the lungs, is made further serviceable to us instead of being deleterious. The waters absorb some of it. But the plants with which the earth is covered, depend upon this very Gas for food. It is absorbed by the soil in some degree. It is greatly absorbed by the leaves of plants, and in the plant a change is effected which restores to us again the oxygen, while the carbon is retained. By some mysterious process, the whole of the carbon is absorbed, and goes to form the juices of the plant, and finally the wood or solid part, and the root, and the fruit, while the oxygen, as soon as the sun gives forth its light, is poured forth from the upper surface of the leaves, which in this case seem to resemble our lungs, but each breathing forth a different gas, which gas is exactly fitted for each other's wants, though deleterious to themselves. But perhaps you will say how is it in the winter? The plants are not flourishing then, but the animals breathe as much, and the fires burn more briskly?

Those countries where the winters are long and severe, are generally full of evergreens, which absorb much of this gas, and it will also be remembered that the winds are more prevalent and stronger than in summer, and also prevail most in a direction which shall waft all deleterious gases to the tropics, where vegetation is in full vigor, and will absorb it for our relief. It is possible also that there may be other sources by which our atmosphere is purified, with which we are not acquainted.

We began our last number by stating that this substance (carbonic acid) was found in the atmosphere, but not an essential ingredient of it. Having also stated that it was contained in other substances, and that it was a compound body, made up of carbon and oxygen; it may be well to give some further description of this elementary or simple substance, called carbon, than what we have. As before stated, the purest form in which we can procure it, is in the state of charcoal, though it occurs in a state much more pure, formed by the hand of Nature, in the Diamond. It may perhaps, be rather incredible to many, to state that the diamond, so valuable, and so precious, should be made up of the same ingredient as the common charcoal. But so chemists assert; and we suppose that we must admit that they are right. We do not assert it ourselves from any experience or experiments of our own to prove the fact, for whoever knew an *Editor* to have diamonds to play with? And it is dangerous to doubt one who has. We will only say therefore, that it is possible that the few experiments that have been tried, and which are cited as proof of the identity of charcoal and diamond, may have led to wrong conclusions.

#### Musical Concert.

We were much gratified in attending the Concert given by Mr. GOULD and his pupils in this village on Saturday evening last. The state of the travelling and the weather prevented many from attending that otherwise would. The performances were, with slight exceptions, highly creditable

Page 11

to the Choir, and all who attended went away well pleased.

An Address was also given by Rev. Mr. THURSTON, replete with good sense and valuable information. He urged the necessity of teaching the science of music to every one without exception who could talk. This may seem rather odd to many who never dared believe that they had either voice or ear for music—but he made out a pretty strong case of it, although he admitted there might be some whose singing would not be over smooth. We think so too.

### Communications.

*For the Maine Farmer.*

#### Causes of Poverty among some Farmers in Maine.

MR. HOLMES:—I have thought that I might do good by mentioning a few of the causes of the poverty of the farmers in the State of Maine. And first, in a negative point of view. It is not because the crops are not as good or as much to the acre as other parts of the United States. When Greenleaf prepared his statistics of Maine some years ago, the average of wheat crops were, in the County of Kennebec, eighteen bushels per acre, and it is believed there has since been an improvement in that crop, and a very great one too in this section. I think we may now state the average at more than 20 bushels. It is alike good for all the small grains. Grass is abundant in most seasons. We must therefore look for the positive causes somewhere else, and not in the unproductiveness of the soil. I will now mention a few things which I think has a bearing to a great extent on the farming community.—And first, their mode of living. It costs a farmer in the State of Maine more to live than it does perhaps in any other State in the Union, and I am certain that it costs more to our farmers to raise up a family of four, than it used to sixty years ago, in Massachusetts to raise up a family of fourteen.

Second. The raising of so much poor and ordinary neat stock and horses. At the present prices none but the best will pay for raising. Our farmers are under family temptations to raise bad stock, a calf comes, round and fat; at three weeks old he is a handsome creature. The boys plead to have him raised. Good family cows being heifer calves; the good housewife insists that they shall be kept and raised, with this argument, viz: that they will make as good as their dams. Another cause of raising calves is, the wife says she cannot spare the milk to fatten it. Now you should resist all these; kill all your calves but the very best, and give them good keeping. It is impossible that a country where black cattle and horses are fed on dry food so long in the year can afford to raise poor cattle. Set down the first stormy day and calculate the cost accurately and satisfy yourself.

Third. Not ploughing land as often as it ought to be, is another reason. They must sow more—and they do not employ as much capital upon their farms as would be profitable. An English farmer would have a compost heap, \$4000, while many of our farmers carry on extensive farms without using manure of every description enough to cost as many cents.

The crops of some Pennsylvania farmers, from 100 acres, amount to from 3 to 5 thousand dollars per annum. Calculate if you please the profits of almost any tilled crops, and there will be a fair profit. Wheat, barley, oats and peas, or even oats alone, are all profitable. By neglecting the above, we do not raise our own bread, when we ought to

raise hundreds of barrels of flour for market; and it can be done with profit. Try your arithmetic again some leisure evening.

Fourth. A want of attachment to the country or State. Some forty or fifty years ago, young men came here to make their fortunes, and perfect themselves in the practice of law or trade, &c. with a firm determination to go back when that was accomplished. We suffer to this day on account of the same conduct. Even of those who are raised here, many of the best talents go to other places.—Stay where you are; feel at home and act accordingly.

Fifth. We have always neglected ourselves at the polls; and perhaps we always shall. For one, however, I am determined to throw by party names and vote for none but such as I believe, from the best evidence, are friends to Agriculture and the Mechanic Arts, and will pursue measures for their benefit and protection. Now whatever is best for them is best for all. An active, healthy agriculture is the most sure means of enriching a State. Remember this hereafter.

Sixth. We withhold more than is meet. Many do not take an Agricultural paper. This I mention last, though not least. Knowledge is power.

A VOTER AND A FARMER.

*For the Maine Farmer.*

#### Sea Coal as a Manure.

MR. HOLMES:—Although I am no farmer I feel considerable interest in the improvements of the day. I am sensible that good manure is an essential ingredient in producing vegetation. I have seen many suggestions on making compost manure, in which the object seems to be to obtain the largest quantity without regard to the quality. I have noticed accounts of premiums awarded for making large quantities of compost manure, when from the ingredients used, I was satisfied the quality was indifferent, or of little value. I now wish to enquire through your paper, of the truth of a statement I saw in the Medical and Agricultural Register for February, 1806. The article is entitled "Some Experiments on Sea Coal as a Manure, by Thomas Ewell." In page 26, towards the close of the article he says, "Probably the discoveries which have been made, are not as generally known as they should be. It may be owing to this cause—for example, that an ounce of sulphuric acid is not added to every load of manure—which has long since been found in England to render it doubly valuable."

I have no means of knowing what authority Mr. Ewell had for this statement respecting sulphuric acid. I should like to know more about it. If one ounce can produce such an effect in a load of manure, what would be the effect of a larger quantity, &c. I am a friend to experiments properly made. Experience is a good schoolmaster. I have noticed some communications speaking lightly of Barnum's method of raising potatoes, &c. I think highly of Barnum's communication, and esteem it a valuable document. I have fully satisfied myself by experiment.

The last season I raised at the rate of fifteen hundred and ten bushels to the acre on Barnum's principle. I have made a number of experiments on vegetation—perhaps they are not worth mentioning. I will however mention some.

From the proceeds of one seed of a potatoe ball the second year, I now have 24 pounds of handsome potatoes. I have eight different kinds of potatoes—those produced from the seed are different from any others in my possession. The produce

of one eye of a potatoe last season was eight pounds of good sized potatoes. By planting the eyes of large potatoes in rich ground, I raise a large size—I had many that weighed one and a half pound, and one weighed two pounds and ten ounces—(a Quoddy blue)—I recommend manuring heavily and seeding lightly—3 eyes of a potatoe is as much seed as I want in a hill. The same observations respecting manuring and seeding will apply to all other vegetables. But in selecting manure I would prefer one pound of good strong manure to ten pounds of the compost manure which I have seen described. Respectfully,

HEZEKIAH PRINCE.

Thomaston, Feb. 16, 1836.

REMARKS. The experiments of Mr. Prince are very interesting, and we are extremely happy to hear of his success in his labors. The great increase from a single seed of a potatoe ball in so short a time, gives one a pleasing idea of the creative powers, if we may be allowed the expression, of the cultivation of the soil. By submitting the seed to the earth and regulating the process he is enabled to produce results which instruct, delight and profit. His recommendation in regard to manuring and seeding are worthy of attention. In regard to the Sea Coal we apprehend that very few if any in Maine have ever used it as a manure, and are therefore unable to answer from experience his queries respecting it. Ed.

*For the Maine Farmer.*

#### Is Fire composed of Particles?

MR. HOLMES:—Is fire composed of particles? Has it any ponderosity? I know when it enters a combustible it may expel air or vapor, and in this case we cannot ascertain whether it has ponderosity or not. But it does seem to me when it enters a mass of steel or even iron of a certain weight, that it does not expel or draw out just as much air and vapor as it weighs itself—for no difference is found in those articles before heated and after, heat as hot as you will. I am aware that it has been called an element, which seems to denote that it is composed of particles. I do not know but it is so, but I never saw any fire, only the effects of it. Your ideas on the above subject will be as gratifying to me as your last chemical remarks respecting water.

NO PHILOSOPHER.

*For the Maine Farmer.*

#### "Anti-Friction"—Again.

MR. HOLMES:—The remarks which I made in a late number of your useful (and should be widely circulated) paper, concerning a certain mode of reducing friction on the axles of carriages, &c. has called forth a long communication from Mr. J. C. Green, 'full of sound and fury, signifying nothing.' He has ransacked the whole vocabulary of abuse for epithets to apply to a poor "mean wretch," because, forsooth he dared to question or doubt that they (Messrs. Fisk & Green) were the original inventors of that "mode." And for this simple enquiry he has mounted his straddle-bug and come down upon me like "a house-a-fire," and "requests the writer to give his name, that they may return to him their thanks for his officiousness and enlighten him upon the subject of anti-friction." Their "thanks" are worth but little, and if they wish to teach me "upon the subject of anti-friction" they will find their labor all lost. It requires not the spirit of prophecy to foresee that he is "not so good a Yankee at guessing as some." Had he been he would not have made so many wild shots. It was not my intention to give the public any erroneous

impression, or injure those gentlemen in any respect. I saw their mode of anti-friction at the Cattle Show and Fair in Winthrop last fall, and was informed by a friend who had seen Mr. H's mode that it was much the same. You will remember that I did not pretend to have seen it myself.

As to what he says about attempts to injure him "from interested motives," is all moon shine. I am not at all concerned with Mr. H. or any one else. I am no "pander" to that or any other "concern." I trust I shall always be engaged in better business than that of gulling the public with such useless concerns. I am convinced however that the two modes are quite different from each other, although I have never seen either Mr. H's nor his mode.

I think they are very ungrateful to accuse me of injuring them, for so far from injuring them I have given them a notoriety which they never would have gained. Besides, had he been under the necessity of paying for that advertisement which he wrote in answer to me, it would have cost him 8 or \$10, which he will now receive "free gratis for nothing." His charges of "ignorance" I take from whence they came. I will now leave him and leave him forever.

ANTI-FRICTION.

### Sheep Husbandry.

From the New York Cultivator.

#### The Emigrant Merino.

There does not appear to be among those who write and converse on the Saxony and Merino sheep, a distinct and definite understanding of the subject. By most people they are regarded as distinct races of sheep; and designated by many imaginary distinctions.

To whatever region the Spanish Merino has emigrated, he is to be identified with the original, like the greyhound. Thence arises the inquiry, where has he been preserved in the greatest purity? held in the highest estimation and cultivated with the most care? in Saxony, France or America? And when we talk about the *old fashioned merino sheep*, it must at the same time be understood, that one variety of the parent stock is four times as valuable as others, and this necessarily influences the emigrant, and determines his value. Then comes the consideration of individual peculiarity and excellence, which forms the basis of improvement, and the preservation of his purity.

The first emigration of the Spanish merino with which we have any acquaintance, was to Saxony.

The second was to France, in both instances under circumstances of sovereign or state patronage. This second I shall furnish principally from a transcript of the writings of others.

"When France became a manufacturing, as well as an agricultural nation, it was perceived how great an injury she sustained by being dependant on foreigners for all the fine wool which she employed, and it was well understood how great would be the advantages which she would derive from the production of it within herself.

"This subject occupied the serious attention of Colbert, whom nothing escaped which might tend to the advantage and greatness of his country—he projected a change in the system which prevailed. Succeeding ministers attempted without effect to put his designs in execution.

"It was not until the year 1766, that Daniel Charles de Trudaine, an able minister, employed the surest means of succeeding and thus freeing the kingdom from the tribute which it paid to procure fine wool.—After his death, his place was supplied by his son, who followed the plan laid down by him. Daniel Charles de Trudaine had addressed himself, not to the cultivators of land whom narrow views and prejudices are too apt to deter from adopting whatever they have not seen practiced by their forefathers, but to Daubenton, an able naturalist, who instantly perceived the possibility of what was proposed, and proved it by satisfactory experiments.

"It having been ascertained by a variety of ex-

periments patronized by the administration, and conducted by enlightened agriculturalists, that the merino sheep might be acclimated in France without any change in their wool; application was made by Lewis sixteenth to the King of Spain for permission to export from thence a number of merinos. This was not only granted, but orders were given by the Spanish monarch that they should be selected from the finest flocks in Spain. In the year 1786, 400 rams and ewes arrived in France under the care of Spanish shepherds. Fortunately for France, the improvement begun under Lewis the 16th, was continued through the Revolution, in which almost every useful institution was involved in ruin. A committee of agriculture was formed in the Convention, and under their protection the amelioration of the merino flocks happily progressed. From this originated the celebrated Rambouillet flock. From this flock, a number of rams and ewes are annually sold, after the finest are picked out to keep up the original stock. And notwithstanding the annual sales from the national flocks, the price of rams is daily increasing."

So particular have the governments of Saxony and France been to preserve these flocks from degenerating, and to effect every possible improvement, that they have at different times sent experienced shepherds into Spain, to select from their choice flocks superior individual rams, for which in some instances, they have paid enormous prices, to preserve the necessary change without breeding in and in.

In such high consideration was this subject held by the successive administrations of the French government, that a commission was issued to the institute, to appoint a committee to prepare a treatise on sheep; which was executed, and distributed gratuitously, with that characteristic liberality of the great nation, which has done so much for science, and in arousing the dormant energies of the human mind, to a positive exaltation of character.

Mr Gilbert, a member of the French national institute, in describing the Rambouillet flock, says, "but which certainly does not yield in any circumstances to the most beautiful, in point of size, form and strength; or in fineness, length, softness, strength, and abundance of fleece. The manufacturers and dealers in wool, who came in numbers, to Rambouillet this year (1796) to purchase, unanimously agreed to this fact, at the very time that they were combining to keep down the price." He further states, that the average weight of the fleeces of the bucks, when washed and scoured, exclusive of tags and belly wool, was six pounds. In this country, for the market, we do not scour; only wash, and roll up the whole fleece. The amount of fleece is very much dependent on feed. He says, "the comparison I have made with the most scrupulous attention between this wool, and the highest priced, of that drawn from Spain, authorizes me to declare that of Rambouillet superior."

The Electoral flock of Saxony, and the Rambouillet flock of France, are of the same rank and degree—selected improved merino. How is it then, when Saxony wool takes the precedence of Spanish wool in the market, that Rambouillet does not come in competition with Saxony? Spain and Saxony are preeminently fine wool growing regions; but neither of them extensively manufacturing; they grow for exportation. France, on the other hand, grows prime wool, which is consumed by her own unrivalled machinery.

In the third instance, he crossed the Atlantic for the new world, and landed on our shore. Here he was greeted with an enthusiasm bordering on distraction, and which can now hardly be realized. In the year 1802, the Hon. Robert R. Livingston of this state, with a discriminating patriotism meriting national remembrance and gratitude, sent from Spain two couple of select Spanish merino sheep, the first ever brought to this country. \* Subsequently by himself, Col. Humphrey, Gen. Derby, Consul Jarvis and others, the country was supplied with merino sheep.

Manufactories were now established, and the production of fine wool promised to be a lucrative bu-

\* We beg leave here to state, that the first Spanish sheep were sent to this country in 1801, by M. Delessert, of Paris, one only of which, Don Pedro, figured in the first volume of the Cultivator, page 183, lived to reach land. Don Pedro was kept some time in Ulster county, and afterwards by Mr Dupont, in the state Delaware.

ness. But these prospects were soon dissipated and upset, by the verstability of our own government. And the choice merino buck fell from the exalted sale of \$1,400, to the degraded estimate of 2 or 3 dollars. In the year 1813, I paid \$150 for a Paulaur buck, and \$100 each, for six ewes. In the year 1827, I bought the remnants of some choice Escorial flocks, which had formerly been purchased at \$200 each, for \$2 50 each. And such was the depressed price of wool, that I purchased in the year 1826, cash payment at auction, a package of full blood merino wool, at 25 cts. per pound, and after keeping it two months, I sold it on a credit of 90 days, for 24 cts. per lb.

This extreme vascillation of public sentiment, prostrated the whole interest. Many individuals were involved in total ruin; and small proprietors abandoned the concern.—A few relying on the sufficiency of their own pecuniary resources, on the intrinsic worth of the animal, the estimate of the whole civilized world, for centuries, of its value, only awaited a more protracted extracted exit. From all this, it is plain that there was almost an entire abandonment of the merino in this country.

The result of scientific investigation is, that a conclusion cannot be come at without the whole she—, embracing the subject in all its connexion—

The establishment of facts by experiments involves almost infinite nicety; requiring the whole amount of human discrimination—unshackled by subsisting theories, preconceived notions, and pride of popularity. An opinion is a mere nullity, separated from the considerations necessary for its formation. And the experience of every day exhibits the imperfection and fallacy of experiments and opinions. Not only the preceding narrative, but the most scrupulous investigation, will concur in the establishment of the subsequent statement.

The Spanish merino has hitherto furnished the best material for the fabrication of fine woollen clothing; and as a natural consequence and matter of fact, has rendered all Europe tributary to her production.

This sheep being transported to Saxony and France, and there received as an acquisition, its peculiar duty appreciated, nursed with care, preserved in its excellence—must stand preeminent.

Sheep are a defenceless and delicate animal, the prey of wolves and dogs, and subjects of disease; therefore in a domesticated state, requiring the protecting and fostering care of man. And in following the destinies of their itinerant master, are necessarily subjects of acclimation.

The Spanish merinos, with their gradations, have passed this ordeal in our country. The Saxony merino have not in point of time been allowed the same courtesy and indulgence.

Who then, permit me to ask, who, in defiance of the light of science, and the experience of the world for a century, will be disposed to retrograde? Now what shall we do with this chimney corner and barn yard phrase, "*old fashioned merino*?" I am as fond of antiquity as any one else, but I am unwilling to indulge this taste, at the sacrifice of a distinctive perception of things.

P. S. Permit me to commend the letter of Leonard Jarvis, Esq., in the last Cultivator, written with much ability and great fairness. It is from such sources that we are to take information. For scientific examination and investigation cannot be profitably prosecuted in an obstinate and controversial way.

"But man we find the only creature  
Who, led by folly combats nature;  
Who, when she loudly cries, forbear—  
With obstinacy fixes there." Swift.

ELI WHITNEY, the inventor of the cotton-gin, was born at Westborough, Mass. His father was a respectable farmer. The invention is said to have raised the value of real estate at the South 100 per cent, and the benefits of it have been estimated at over one hundred millions of dollars. It enables one man to perform the work of a thousand men, and furnishes to the whole family of mankind, at a very cheap rate, the most essential article of their clothing.—Nor. Advertiser.

Dr. Franklin observed—"the eyes of other people, are the eyes that ruin us. If all but myself were blind, I should neither want fine clothes, fine houses or fine furniture."

## Agricultural.

*From the Genesee Farmer.*

### Farm Implements and Labor Saving Machines.

As farmers generally have more leisure at the present season than at any other time of the year, we would recommend to their attention procuring and repairing such farming implements as they may need for use during the ensuing season. Ploughs, harrows, rakes, hoes, shovels, forks, carts, hay racks, scythes, cradles, and many other things, should be examined and put in order; and if there is a probability of there not being a sufficient number for performing conveniently the required work, it will be proper to procure additional ones to supply the deficiency. We do not wish to advocate a lavish waste of money in buying what would be unnecessary, but to direct the attention of farmers to the importance of always having at hand a sufficient number of tools. It is no evidence of economy to save a few shillings by refraining from the purchase of a rake or a hoe, and afterwards lose a day's work or more, in a hurrying season, in consequence of the deficiency thus occasioned. Neither is it a proof of economy to purchase the cheapest implements only. The cheapest are generally the worst made, and are either weak, or clumsy. We have known active workmen to waste half their strength in using such—in performing, day after day, not more than two thirds of the labor they might have done, had they used strong, neat, and well made tools. As it is impossible to work *without* tools, so it is impossible to do work well and expeditiously, without *good* tools.

Another important subject, is that of labor saving implements and machines. There is one great advantage in these, which is generally overlooked. By enabling the farmer to despatch his business, his work is more completely under his control; and and he is enabled to guard against loss or damage which might be the consequence of more protracted operations. Thus for instance, in using the horse rake, he is not only enabled to accomplish the same work with one quarter of the expense he would otherwise have to employ; but by enabling him to perform it so much more expeditiously, he can take advantage of the weather, and have many acres of hay upon the ground without the danger of having it spoiled by rain; as the speed with which he may collect it with a horse rake, enables him to anticipate the approach of wet weather. Thus, independently of the *immediate* amount of labor it saves, it prevents the troublesome operation of drying wet hay, after it has once before become fit for the mow or stack. Again, by the use of the planting or drilling machine, one man is enabled to do the work of several; this is one item of saving; but in addition to this, it very often happens that a crop may be planted with it during a favorable season, and while the ground is in the best possible condition; while, without it, the work might be protracted till the ground is rendered unfit by heavy rains; and a loss of many bushels to the acre sometimes arises from crops being planted out of season.

A vast amount of labor might be saved by employing a moderate share of thought and contrivance in constructing or procuring, and arranging, some of the simpler and more common kinds of labor saving machinery. Threshing machines have become very common, and many are connected with a portable horse power, which may be separated from the machine and applied to other purposes. This may be easily, and it sometimes is, attached to a circular saw, (the cost of which is comparatively small,) and the expensive and laborious operation of sawing wood by hand, is rendered expeditious and easy. It may also, with a little contrivance, be made to work a straw-cutting machine, a turnep and potatoe slicer, a corn sheller and other similar machines, which are commonly worked by hand; and this may be frequently done while it is driving a thrashing machine, or performing other work. We have known a fanning mill to be connected with it, and worked by it, the thrashing machine being situated on a floor above, so that the wheat fell directly from it into the hopper of the fanning mill, and passed out ready for market. We have also heard of a pair of buhr-stones placed in a barn, which could be driven by the power of a thrashing machine, and used for grinding food for domestic animals. By a little attention and thinking, numberless similar conveniences may

be devised. Improvements of this kind should not however be adopted, until calculation has proved that from the amount of labor they will be required to perform, the ultimate saving will more than counterbalance the immediate cost.

*From the Genesee Farmer.*

### On the Limits of Heat.

In the *Revue Encyclopedique* it is stated that M. Arago deduced the following consequences from a great number of observations made with the thermometer:

"1st. In no place on the land, and in no situation will a thermometer elevated two or three metres (from 6 to 10 feet) above the surface, and sheltered from all reverberation, rise to the 37th degree of Reaumur or 46th degree of the centigrade scale (=115 3-4° Fahrenheit.)—2d. In the open sea, in whatever place and season, the temperature of the air never surpasses 24° Reaumur (=86° Fahr.)—3d. The greatest degree of cold observed on our globe, with a thermometer suspended in the air is 40° Reaumur (=58° Fahr.)—4th. The water of the sea in no latitude or season, acquires a temperature above 24° Reaumur or 86° Fahr."

We have introduced these results as a test for the following observations on the same subject, published in Silliman's Journal, and which "formed originally one of the concluding lectures of a course of chemical instruction." We trust the whole will be acceptable to our readers.

"We can hardly find any thing in the natural world more evincive of design, or more indicative of the wisdom of the Creator, than the means used to keep up that uniform temperature, which with some slight variations, is constantly maintained at the surface of the earth. Accustomed to see the varieties of temperature limited to so small a scale, you might content yourselves with thinking that this was the natural course of things, without taking the trouble to inquire whether any machinery of the natural world were adjusted on purpose to support this equilibrium of the temperature. But this happy adjustment is by no means accidental: we can even see the springs by which it is effected."

"In the first place, heat manifests the strongest tendency to diffuse itself in every direction. Let us concentrate it in any given spot, and it flies off with inappreciable velocity; and unless the intensity be maintained by constant additions of heat, that spot or body shortly becomes reduced to the same temperature with surrounding bodies. Upon this agent itself, therefore, is impressed a character that restrains the violence which it seems constantly prone to exercise."

"In the second place, the AIR by its elasticity, affords the means of conveying off all excesses of heat. This cause operates in maintaining the equilibrium of temperature on a most extensive scale. We see its action, at one time in gentle gales and breezes; at another in the northern blast; at another, in dreadful hurricanes that sweep around this solid ball. All these, whatever partial evils they involve, contribute to this grand benevolent design: to keep the raging element of fire within its own narrow bounds."

"In the third place, the vast collections of WATER, which cover so great a part of the globe, furnish another means of regulating the temperature of the earth. So happily does it conduce to this object, that were the art of navigation still unknown, we might fancy that lakes and seas and oceans, were made on purpose to be reservoirs of heat in winter and fountains of cool breezes in summer. The multifarious changes of state which water undergoes, including congelation and liquefaction, evaporation and condensation, are all made subservient to the same end. These operations are the special barriers which Providence has set on the terrestrial part of the globe to check sudden excesses of heat and cold; and few instances of the proofs of intelligent design in the works of creation, among all those happy illustrations which Dr. Paley has collected, ever struck me as more convincing than these. On the approach of a cold night, it is pleasing to watch the thermometer and note the progress of its descent. Perhaps a sudden change of weather has caught the mercury at a high degree. You may see it descend rapidly to the freezing point; and were you unaccustomed to the result, you might imagine that a terrible frost was at hand. But the mercury no sooner reaches the freezing point, than its course is suddenly checked; congelation itself is made to

contribute a portion of heat sufficient to mitigate the severity of the impending frost; and hours instead of minutes, are occupied in carrying the mercury through a few degrees below. In like manner it is pleasing to remark how retarded are its movements, as it approaches the extremes of heat. A hot day is passing over our heads, although as often happens, the morning was cool and temperate. In two hours perhaps, we have seen the thermometer rise from 50 to 80 degrees. Will the heat of two hours carry it forward 30 degrees more, to 110? Experience alone could ensure us against the approach of such a consuming fire. But what prevents it? The evaporation of water from the entire surface of the earth, is now set on foot, with hurried progress, hastening its speed as the heat increases, until it brings to a stand the furious element."

"By these mutual agencies of evaporation and condensation, of congelation and liquefaction, the excesses of heat and cold, to which the temperature of the surface of the earth is alternately prone, are so nicely balanced that among many thousand degrees of heat that lie between the known extremes of heat and cold, the whole range of natural temperature is only 90 to 100 degrees.\* Pleasant and delightful as is this little space in the vast scale of temperature, where all animals so securely dwell, and where the flowers of spring bud and blossom, and the fruits of autumn are matured, still it lies, like a small island in a sandy desert, between two regions of desolation and death, which seem about to blast it, on the one hand with withering frosts, or to consume it on the other, with devouring fire. The causes which we have just enumerated are those effectual barriers that Omnipotence has placed to guard this blooming animated spot against the dangers that encompass it."

\* This may serve as a general or average estimate, but in the inland parts of Asia and of America in high latitudes, the range is much greater. Thus at Stockholm, Stephens says, that in the summer of 1811, the thermometer at one time indicated 96 degrees of Fahrenheit; but in the winter of 1814 it was 56 degrees below the freezing point, or 24 degrees below zero, making the range within those periods equal to 120 degrees. The annual range however, was doubtless much less.—Ed. Gen. Far.

## Mechanics' Department.

### Necessity of Knowledge to insure the Health of Mechanics.

"There is no class of society," says the Journal of Health, "to whom the laws of Hygiene (health) is of greater importance than it is to that composed of the laborer and mechanic. To such, a healthy and vigorous frame is emphatically wealth. Every day, during which their capacity to labor is impaired by sickness or accident, is so much deducted from the fund upon which they and their families can alone depend for support; and yet, from a thousand circumstances intimately connected with their several professions, the health and vigor of their systems is liable, not merely to temporary impairment, but too often, to complete destruction, whenever they place themselves in opposition to the laws of nature, or from ignorance or prejudice, overlook every every precept of hygiene. One of the means best calculated, therefore, to effect that amelioration in the condition of the workingmen which they themselves, as well as their friends of every profession, so earnestly desire, is to diffuse among them a knowledge of the laws of health, and of the means of avoiding the deleterious agents to which they are exposed."

Perhaps we cannot present a better argument in favor of the education of mechanics than is contained in the above quoted remarks. The workingman's treasure lies in his body; and ought he not to bestow at least as much pains in preserving it sound and active as the miser does upon his chests of ore? All men desire life and health; and upon all it is incumbent, as they value these blessings to use every means of preserving them. But to the workingman, his health is his life, for on it depends the means of supporting his life.

But the mechanic is, from necessity—from the nature of his occupation—often placed in situations where a greater degree of care is required to preserve the health, than is necessary for other classes. A portion of labor in damp, unhealthy mines,

in wells and cellars; some are perpetually exposed to the fumes of melted metals, which are well known to be poisonous; others again are liable to injury from the postures in which they are obliged to work, from the want of sufficient or proper kinds of exercise, or even from the use of certain tools and instruments. Who will say that especial care is not needed, to be guarded against all the evil effects arising from these and other similar sources?

Much of this evil results from ignorance; from either not knowing the nature or degree of the danger, or the proper means of removing or avoiding it. Unnecessary exposure to poisonous vapors, working or sitting in postures injurious to health, which might be changed for better ones, using tools of an improper construction, for want of knowledge or ability to construct better ones,—such are the modes in which ignorance is the producer, directly or indirectly, of her numberless evils.

But, you ask, has science, in her boasted progress, removed any of these evils? Many, undoubtedly: and were it not that prejudice interposes a screen to her light, wherever it dawns upon the darkness of ignorance, she might have removed many more. The improvements in the system of mining, in the coal regions of England, whereby the mines are much better ventilated, and freed from noxious and stagnant vapors, than formerly, together with the safety lamp, are a few of the successful efforts of science in the cause of philanthropy. The knowledge of the disinfecting powers of chlorine and charcoal, and the property of the latter to preserve animal substances from decay, may become, if they have not already, a conservative of life and health to thousands. But while we remain, not only ignorant of the properties of these agents, but in disbelief of them, what can be expected in the cause of humanity, from anything that science can do?

It cannot be, till the mechanic himself pays a due regard to the rules of preserving health, and learns the laws of the human system, that the greatest degree of security from the evils of which we complain can be secured. How can he be expected to insure himself from the effects of poisonous vapors, from mineral ores, &c., until he knows their nature, and the manner in which they operate upon the system. How can he know that the very precautions he is using are not the surest means of rendering himself a prey to the poison. Neither is this a mere supposition. Hundreds, if not thousands, have died from poison, taken unawares, who might have saved themselves, had they known the nature of the poison, and the proper remedy. On the contrary, has it not happened, that the supposed antidote, which they took, or it may be, out of many antidotes which were forced into their stomachs, was the very means of hastening their death, by expediting the effects, or adding to the violence of the poison?

But you inquire, finally, whether a knowledge of the principles of science themselves are requisite for the mere laborer, while, as it appears to you, it would be amply sufficient for those who have time to pursue those inquiries more fully, to give all necessary directions and rules derived from those principles, by which the laborer should be guided; and whether they cannot find out and teach the application of scientific principles to the means of preserving health and improving the condition of the people, even better or faster than the people could in any way do it themselves. We answer, No.—In the first place, it is necessary to enlighten their minds thoroughly, with these very principles, before you can, in most instances, make them believe and act upon the rules deduced from them. No more experience is needed on this head. Again:—by knowing the principles they will know so much better how to apply them to their own cases; and only thus, can they know how to vary them so as more perfectly to be suited to peculiar circumstances, which, it can but be allowed, the proposers of the rules, however learned, may neither know of nor be capable of providing for, half so well as those who are influenced by them.

The mechanic alone may have that practical knowledge of the circumstances affecting his health, which must be necessary, in order to provide for its preservation in other circumstances; and the merely scientific man who undertakes to dictate rules of conduct and regimen for him, may, perhaps, find himself in the condition of one who, living five hundred miles from salt water, should pretend to give directions concerning the management of naval affairs.—*Boston Mechanic.*

#### Education Among Mechanics.

We shall continually and earnestly look to the education of our mechanics, as the only successful means of their improvement. We hope that the strong efforts which are now making in the cause of education will not stop at partial results, nor be relaxed, till the whole mass of the community shall be thoroughly imbued with the leaven of sound and practical knowledge. It is now very generally understood and felt, that learning is not alone useful to the rich and independent, but to those who 'eat their bread in the sweat of their brow,' to the cultivator of the earth, and the mechanic who toils daily with his hands.

When we speak of an educated community, we do not premise, that all will become great or learned men; we do not anticipate a community, of literati or scientific experimentalists. There is a common-sense learning, a practical education, which every one can and ought to acquire, which will teach him his duty to himself and his fellow beings, and the best manner of performing that duty. There is an education which fits every one to the sphere of life in which he may be called to move; and this must be attained. It is rather a learning of observation, and the science of common things, than abstruse and deep processes of intellect, which are required for the every-day-man. It is rather general than particular knowledge.

When we speak of learning and science, and the advantages of education, some think we talk of Greek and Latin, and Conic Sections; and they feel no interest in our remarks, and do not consider that our arguments come home to their case. But while we leave those to the divine, and the scholar, we call upon our fellow-citizens who, though in less eminent, are still in useful stations, to become learned in things which concern themselves, their business, and therefore, the general good of mankind.

There are those who are not prepared to comprehend the value of knowledge. That which the experience of those who have tried it has declared to be 'power,' they regard as of little importance to them. These of course care little for books, periodicals, or other now numerous means of intellectual improvement. We can aptly compare them to those who, deprived of the faculty of vision, are contented with the scanty information which the sense of feeling imparts, of the objects within their reach, not imagining how much greater sources of knowledge and useful effort would be afforded them by the use of eyes.

But we would appeal to the mechanic himself on this point, to those, who are endeavoring to raise themselves to a station in society of which they feel themselves deserving, and who have come to the inevitable conviction that without EDUCATION, all efforts of this kind must be finally unavailing. We ask them if they have not seen, that for the very want of this education, rash, injurious and ineffectual measures have been adopted by some among the producing classes, to remove a fancied or real degradation under which they lie.

But that very inequality which they feel to be so oppressive, it is to be apprehended, is in a great measure owing to their inferior amount of intellectual strength. So long as in a free country the intellectual wealth of any class is inferior, so long will the superior intellect of the more educated portion be in danger of overbalancing them. If they endeavor, by combination of forces, to secure the rights and privileges which they claim as their due, a stronger counter-combination might be brought to bear like an overwhelming sea upon them. And though the merchant, and the professional man, and the independent landholder, may not organize under the banner of a constitution, to bear down the struggles of the operative in asserting his claims, the effect of a combination may as truly take place as though its spirit were present, from that self-interest in which men must be expected to act, in bringing their resources to bear upon their own private emolument, without regarding the general good.

But should we accuse the mercantile man of appropriating his resources too exclusively to the increase of his capital, and the professional man of sometimes using his intellect to promote his own ends, to the neglect of the general good,—if we have reason to believe, as we are told we have, that the operations of these classes have, in a measure, a tendency to injure a portion of the communi-

ty, by causing the distribution of wealth to be disproportionate to the labor bestowed for it, by those of different occupations,—we also blame the mechanic, for having been content to stand so low, and to exert so little influence. He is to be blamed for having forgotten that elevation of condition is only to be made permanent by a corresponding elevation of moral sentiment and intellectual power.

It will be alone when he has learned to think and to reason, that he will be able to take a successful stand to maintain his integral rights. Then in the great Hall of Legislation, will he come forth, and bring his sound and practical intellect into contact with the more refined, and it may be, too theoretical minds of many professional legislators.

We feel that a change has even now begun to come over the face of a wide-spread community. If an era of rapid advancement in science is already darting its noonday beams upon the 19th century, an era, we trust, is dawning, of the universal diffusion of general knowledge among the people, which may spread a life-giving light even over the world, and arouse the nations to see and to seek their own best good in the fulfilment of the laws of their Creator.

To realize the near and successful accomplishment of such a revolution as this in the community, and to secure all the advantages of the general diffusion of useful knowledge it behoves not only those already high in intellectual advancement to use their efforts in sustaining the influence of the higher seminaries and colleges, and causing them to advance with the spirit of the age, but it is incumbent on every class of society to seek their own moral and intellectual improvement, in the highest degree and manner comporting with their various stations and occupations. The spirit of the love of knowledge must be diffused, and felt, among those who are now insensible to it; and men must learn, not only that their hands, but their minds, are given them for all important purposes: and we trust that the portion of the community to whom we particularly address ourselves, will not fail to see that on their effectual labors will depend no inconsiderable portion of the happy results of the general diffusion of knowledge.—*Id.*

#### Advancement in the Useful Arts.

We are fully satisfied, that if Franklin's half formed wish, to be revived like some flies preserved in spirits, a hundred years after his death, to see the improvements in the country, could now be gratified, he would consider the progress already made, to be far beyond his expectations. The steamer which bears his name, would hardly carry him from place to place with sufficient rapidity to gratify his eager curiosity. We do not propose to enter, at this time, into the full consideration of this subject, but merely to introduce the short but comprehensive notice of the Governor of Massachusetts in relation to it, contained in his annual speech, at the commencement of the session of the General Assembly the present year. The correctness of the sentiments will be recognized by every man who will open his eyes, to see what has been, and is now being done.

Within the last half century, the advancements in knowledge have increased the productions necessary and useful to mankind, beyond all former example. Machinery and tools, abridging human labor, have been introduced into most employments with such success, that the greatest art now consists in making the implements with which labor is performed. It required great intellectual penetration and comprehensiveness to invent, and the accomplishments of ingenious artisans to construct, the spinning frame, the power loom, the printing press, the machine for making paper, or for making cards; and yet any of these, as well as thousands of others, equally important, are managed and worked easily by females and children. These substitutes for human toil are adapted to our necessities, and minister largely to our happiness, by enabling us with greater success to withstand the overwhelming competition of foreigners.

Discovery has hitherto produced no agent, unless the Mariner's Compass, that promises to work greater changes in the condition of mankind, than steam, in its application to transportation. It has converted the great rivers of this broad country into highways, that bear upon their surface an immense trade, and thus, as well as by peering mountains, it brings regions which must otherwise have

remained strangers into almost daily intercourse, creating innumerable ties of mutual dependence, strengthening ties by constant social intercourse, bearing onward a commerce that reaches from extreme to extreme, covering the whole country, and adding to our political union, the ligaments that alone can sustain it a union of interest. This application of so powerful an agent seems to have been reserved for this age, to demonstrate that if we do not live in harmony, and perpetuate our republic, it will be because of our folly or our wickedness.

'It must be gratifying to the people of the Commonwealth, to see the proofs of enlightened private enterprise, in opening ways for it to traverse the interior regions of the state. Long lines of easy, expeditious and cheap communication are constructing, which will give new facilities to business, new inducements to invest capital, and new employments to labor. The resources of agriculture will be enlarged, the markets, business and population of the metropolis increased, and we shall, I trust, be able to maintain a successful competition in prosperity with those states which have added to their greater natural advantages, like improvements.

### Legislature of Maine.

*Tuesday, Feb. 16.*

IN SENATE. Mr Jarvis from the committee on Banks and Banking, reported a bill to increase the capital stock of York Bank \$25,000, together with other bills for increase of capital and incorporation of new banks, which are all included in the table accompanying the report of the Bank Committee of Feb. 3. which may be found in another column; on motion of Mr Purinton they were laid on the table.

On motion of Mr Severance, Ordered, That the Committee on Banks and Banking be directed to inquire into the expediency of so far altering the law of March 31, 1831, to regulate banks and banking, as to provide that the amount due from the directors as principal or surties, shall not exceed ten per cent of the capital stock, instead of thirty-three, as now divided.

On motion of Mr Jarvis, the bill prohibiting the emission and circulation of small bank notes was taken up; the question being upon the adoption of an amendment offered by Mr Jarvis, to strike out five and insert three in the 8th line of the 1st section which provides that after the 1st of June next no banking company shall issue bills of a less denomination than \$5. (By a former amendment three had been stricken out and five inserted.)

The amendment was advocated by Messrs. Jarvis and Merrow, and opposed by Messrs. Purinton and Johnson, and the question having been ordered to be taken by yeas and nays, was decided in the negative as follows:

Yeas—Messrs. Benson, Jarvis, M'Intire, Merrow, Pierce, Severance, Spear—7.

Nays—Messrs. Clark, Greene, Johnson, Latham, Manter, Miller, Purinton, Staples, Swift, Talbot, Weeks—11.

HOUSE. *Passed to be enacted.*—An Act to incorporate the proprietors of the Grove River Mill Company; an Act to incorporate the Castine Steam Mill Company; an Act to incorporate the Trustees of the Freedom Academy; an Act additional to an Act to incorporate the Cumberland Steam Navigation Company; to incorporate the Elm Grove Cementary.

Bill additional to organize, govern and discipline the Militia, (providing that selectmen &c. of towns and plantations shall establish company lines and make return thereof to the office of the Adjutant General) was read a third time, and after some discussion, postponed till Thursday next.

*Wednesday Feb. 17.*

IN SENATE. The Governor transmitted an address and resolutions of the General Assembly of Alabama, on the subject of domestic slavery, which was read and referred to the committee who have under consideration resolutions of a similar character from North and South Carolina.

*Passed to be enacted.*—Bill to incorporate the Castine Steam Mill Company; the Goose River Mill Company; the trustees of Freedom Academy; the proprietors of the Elm Grove Cementary; additional to incorporate the Cumberland Steam Navigation Company.

HOUSE. Bill respecting petition for Railroads

and Canals, (requiring that the petitions shall be accompanied with a plan, and report of preliminary survey, the principles of the Bill have been before published and also some debate upon it.) After considerable debate, Mr Hobbs of Eastport offered an amendment to strike out all after the enacting clause, and insert a provision that should require petitioners to state the beginning and ending of the contemplated Railroad, its general course and the towns through which it should be found to pass after actual survey. Mr Hamlin of Hampden offered an amendment providing that those petitioners already before the Legislature should in no way be affected by the Bill, whether acted upon at this or any future Legislature. The amendment to the amendment was adopted, and also the first amendment. The question then returned upon indefinitely postponing, which was negatived by a vote of 104 to 28—The Bill then passed to be engrossed.

*Thursday, Feb. 18.*

IN SENATE. On motion of Mr. Purinton the bill prohibiting the emission and circulation of bank notes of a small denomination were taken up.

The question upon passing the bill to be engrossed was taken and decided in the affirmative as follows:—

Yeas—Allen, Clark, Fish, Frye, Greene, Jarvis, Johnson, Kelsey, Latham, Manter, Merrow, Miller, Pierce, Purinton, Swift, Spear, Staples, Talbot, and Weeks—19.

Nays—Benson, Jewett, M'Intire, Robinson, Severance—5.

HOUSE. Bill additional to organize, govern and discipline the Militia (requiring Selectmen of towns, &c. to establish company lines and make returns thereof to the Adjutant General,) was committed to the Committee on the Militia with instructions to report to-morrow.

An Act defining the rights and duties of Railroad Corporations, was taken up, and after some amendments—some discussion arose upon an amendment offered to allow five rods instead of four to be taken, as the Bill provided—Mr. Allen, of Bangor, proposed six rods, which was negatived by a vote of 76 to 66. The question then returned upon five rods, and that amendment was adopted,—after being further amended, it passed to be engrossed.

*Friday, Feb. 19.*

IN SENATE. Mr. Clark, from the Committee on Railroads and Canals to whom was referred the report of the Board of Internal Improvements, reported a resolve appropriating \$6000 for the purchase of instruments and the prosecution of surveys during the ensuing year, which was read once and to-morrow assigned for a second reading.

Mr. Purinton from the Committee on Capital Punishments made a report, 1000 copies of which were ordered to be printed.

HOUSE. On motion of Mr. Potter of Augusta, Ordered, That the Committee on the Judiciary be instructed to consider of the expediency of limiting by law the length of time when fences and other fixtures shall be deemed and taken as the boundary lines on any public grounds or highways in case of any uncertainty as to the true boundaries thereof.

On motion of Mr. Emery of Saco, Ordered, That the Committee on Literature and Literary Institutions, be instructed to inquire into the expediency of revising all the Statutes relating to Schools, and that a report of the condition of the Schools within the State be immediately made to the Legislature, accompanied by an abstract of the school returns.

*Passed to be engrossed.* Resolve to complete the distribution of the school fund for 1835; an Act defining certain rights and duties of railroad corporations; an additional Act respecting Lewiston Falls Academy.

*Saturday, Feb. 20.*

IN SENATE. The Committee of conference on the bill for the protection of towns from fire, (respecting blacksmith shops) made a report recommending that the Senate recede and concur with the House, in its indefinite postponement. On motion of Mr. Benson, the report was laid on the table.

HOUSE. The Committee to whom was referred an order directing them to inquire when the House could hold two sessions, reported an order which passed, that the House hold two sessions a day after the 1st of March.

Legislation inexpedient reported and accepted on the order of inquiry in relation to the expediency of appropriating Bank tax to defray State expenses.

An order of inquiry passed concerning the expediency of passing laws to prevent frauds in the sale of screwed hay.

*Monday Feb. 22.*

IN SENATE. Resolve authorizing a temporary loan in behalf of the State, (\$65,000) was read twice and passed to be engrossed.

Resolve requiring the State Treasurer to pay the members of The Legislature and to distribute the school fund in gold and silver came from the House accompanied by a communication from the Treasurer, stating the difficulty of obtaining the specie before the time appointed for the distribution of the school fund, and the probable expense of obtaining it; the resolve having been indefinitely postponed in the House. Mr Purinton spoke against the indefinite postponement and Mr Benson, in favor of it, and the question having been ordered to be taken by yeas and nays, on motion of Mr Purinton, was decided in the negative as follows:

Yeas—Messrs. Allen, Benson, Jewett, M'Intire, Merrow, Pierce, Robinson, Severance—8.

Nays—Messrs. Clark, Fish, Frye, Greene, Kely, Latham, Miller, Purinton, Staples, Strickland, Swift, Talbot—12.

HOUSE. Report of Committee on Capital Punishment was received from the Senate, and ordered to be printed in concurrence; other papers from the Senate were also disposed of in concurrence.

An Act requiring the Treasurer to pay the members of the Legislature and distribute the school fund in gold and silver, was, on motion of Mr Woodman of Wilton, indefinitely postponed.

### Summary.

*Affairs with France.*—Letters from Mr. Vail, our Charge d'Affairs at London, reached Washington on Sunday, announcing that our affairs with France were settled, and the money was ready.

*Flour.*—We have to notice an improvement in the price of Flour, and quote the wagon price at \$6 50 a 6 56, perhaps a few cents, 4 to 6 more, have been paid in barter. Moderate sales were made yesterday from stores at 6 65. Most holders ask 6 75, and some in advance on that.

*Alexandria Gazette, Feb. 16.*

*Fire.*—The south College in this town, (known by the name of the Maine Hall,) was consumed by fire on Wednesday morning last. The fire when first discovered, about half past 2 o'clock, was bursting out of a room in the lower story—northeast corner, and so rapid was the progress of the flames, that nearly all the northern half of the building was on fire before the arrival of the engines. The building was divided in the centre by a brick partition, but in consequence of the scarcity of water, and the extreme cold, the southern section could not be saved. Nearly all the furniture and books in the northern section of the college were lost, while all in the southern section were saved. Prof. Adams, who occupied a room in the second story, broke his leg by leaping from a window, and was otherwise injured. Fortunately all the students made their escape uninjured, although several lost nearly all their clothing. The Library belonging to the Athenæum Society was entirely destroyed. The same building was destroyed by fire in March, 1822. The college was insured in Boston for about half its value.—*Eastern Baptist.*

We learn that the house of Maj. Stackpole, situated about one mile west of S. W. Bend village in Durham, was burnt on Tuesday night last. The fire had made such progress before it was discovered that the family had barely time to escape. None of the furniture and but a small part the clothing was saved; the children being obliged to walk barefooted near half a mile, to a neighbors.—*Is.*

*Capture of an armed brig by a British man-of-war.*—Captain Stowe, of the British bark Ospray, from Montego Bay, informs us that he spoke, on the 20th Jan. off the west end of Cuba, H. B. M. sch. Pike, Lt. Com. Brookings, who informed him that two days previously he captured the brig Esmarelda, which had a crew of 36 men, and 8 long 18 pounders mounted. She was without papers, and it was supposed that she was a slaver, but had

previously landed her slaves. Lt. Brookings, with his prize, was bound into Havana.—*Norfolk Bea.*

**Distressing.**—A few days since a number of people assembled at a Grog shop in Union, Me., and after getting a good drink on, three of them, Luther Harmon, a man by the name of Robbins, and a third person, whose name we do not know, got into a squabble about the water pail. The third person took down Harmon in good nature, when Robbins endeavored to wrench the pail from the hand of Harmon, but could not. Robbins then kicked Harmon three times in the temple with the heel of his boot. The man who was holding down Harmon sprang up saying to Robbins, 'I am not going to hold Harmon down for you to kill him.' Harmon got up, said he was much hurt, took a few things and started for home. He was found a short distance from the store crawling on his hands and knees,—and when the wretched man was asked what was the matter, he could not speak, but pointed to his temple. The poor man was taken home, where he lingered a few days, but never afterwards spoke. He frequently drew the attention of the Doctor and others by pointing to his temple. Thus Cursed Rum has sent another victim to the grave.  
*Belfast Republican.*

**The Indian War.**—The last Macon paper states that 5 companies of militia, consisting of 70 to 100 men each, were to leave that place forthwith to operate against the Indians in Florida. Accounts from N. Orleans state that 200 men in that city had volunteered for the same service, and that the number would be increased to 500. A regiment of U. S. troops was hourly expected, and with the volunteers would make a force of 1000 men. An endorsement on the Columbia (S. C.) Times of the 5th inst. says, "The Governor has made a draft of another regiment for Florida."

**Steamboat lost, and ten or twelve lives.**—We copy the following distressing account from the Savannah Georgian of the 3d inst:—

**Loss of the Steamer Pioneer, belonging to the Pioneer Line.**—The following letter from the captain of the boat to the agent in Darien, gives all the particulars received:—

**Dugg Landing, Lowder's Bluff, Jan. 31.**  
Dear Sir—This will inform you of the loss of the Pioneer at this place. We were at the landing, and had commenced taking in wood, when the explosion took place. The steamboat and both tow-boats are sunk, and ten or twelve men killed. I am very much hurt myself. I am now at this Bluff, and will be glad of medical aid for myself and men as soon as possible.  
JOHN S. GOODWIN.

Of all the nuisances of which the social circle is subject, your regular-built-leaver-open-of-the-door, is the most intolerable. "Shut, shut the door, good John."

The New Orleans Bulletin of Feb. 2d, contains a public declaration of the Independence of Texas, signed by a number of Americans.

Dr. Muzzy has been lecturing against Phrenology at Lowell lately. The editor of the Lowell Patriot remarks that his discourses are more "witty than wise."

The whole region of Penobscot County give indications of coal formations, and in several places it has been found.

"GO AHEAD." The Halifax papers talk of starting a South Sea Whaling Company—to commence with two ships at a cost of £15,000.

The Quebec papers speak of large quantities of fresh cod and haddock being carried there by the fishermen of Maine.

The Administration have resolved to adopt vigorous measures in relation to the Indians in Florida. Gen. Scott has left Washington to take command of the troops to be employed in repressing the hostilities of the Seminoles.

The editors and publishers in the State of New York, are making arrangements for holding a convention in Utica. Various subjects are already suggested for the consideration of the Convention, among which are, requiring payment for newspapers to be made in advance; petitioning Congress for a free transmission of letters; compelling makers and venders of patent and quack medicines, to pay a full price for their advertisements, &c. &c.

## Marriages.

In Anson, 14th inst. by John Leathhead, Esq. Mr. Orson Lane, aged 21, to Miss Betsey Bacon, aged 43.

In Vassalboro', Mr. George Stuart to Miss Cements Wing.

In Norridgewock, Mr. Solomon Low to Miss Olive R Hill.

In Bath, Mr. Charles Banks to Miss Elletther Spinney.

## Deaths.

In Turner, Feb. 1st, Mrs. Olive, wife of Mr. Nathan Sawtell, in the 35th year of her age. She has left a bereaved husband, two orphan children, and a large number of connections and acquaintances to mourn her loss.

In Turner, Feb. 7th, Mrs. Lucretia, wife of Mr. Joshua Whitman, mother of Mrs. Sawtell, and daughter of the late Rev. John Strickland, in the 60th year of her age. She has left a bereaved husband, a large number of children, grand children, connections and acquaintances to mourn her loss. To her children she was a mother, to the sick and distressed she was a comforter, and the needy she turned not away empty.—*Com.*

BRIGHTON MARKET.—MONDAY Feb. 15, 1836.

*Reported for the Boston Atlas.*

At Market 435 Beef Cattle, and 350 Sheep.

**PRICES.**—Beef Cattle—No material change in prices for a like quality from last week. We noticed a few yokes extra taken at 40s 6d, and one yoke at something more. We quote first quality at 32s a 39s; second quality at 31s 6d a 34s 6d; third quality 24s a 28s 6d.

**Sheep.**—All at market were of an ordinary quality for the season. We noticed the sale of one lot only, of about 100, taken at 18s 9d.

**Swine.**—None at market.

**Hallowell Female High School.**

MISS PAINE and MISS WEBB will commence their Spring Term, on the first Monday in April next.

Spanish, French, and Mezzotinto Shading taught.  
Hallowell, Feb. 18, 1836.

**Leavitt's Rheumatic Liniment.**

This Liniment has been in private use for three years, and has never failed of affording relief whenever it has been used, which fact has induced the proprietor to offer it for sale.

All he has to say in favor of it, has been said in the above paragraph, and he now offers it to the public for what it is, in and of itself. If it is of utility, it will stand without recommendation; if not, they will not impart healing virtues.

The above may be obtained of his authorized Agents, by the dozen or single, or of him at the Store of EUSTIS & LEAVITT, Dixfield, Me. and of Traders generally.

**Agents.**—William C. Mitchell & Co. Corner of Union & Middle Streets, Portland, Maine. Pratt & King, 28, India Street, head of Central Wharf, Boston, Mass. C. LEAVITT, Jr. Proprietor.  
For Sale by DAVID STANLEY, Winthrop.

## Notice.

The Copartnership existing between the subscribers will be dissolved on the first day of May next by mutual consent. They therefore request those indebted to them to call and settle immediately.

DANIEL CARR,  
JOHN R. SHAW.

Winthrop, Jan. 18, 1836.

**Plaster Paris, &c.**

The subscriber has on hand 1000 Casks Ground Plaster Paris of superior quality. Great pains having been taken by an experienced person in selecting the Plaster for the Lubec Manufacturing Company. Also 3000 bushels Liverpool SALT—20 hogsheads *retailing* Molasses—Fish—Tar—Rosin. Together with a general assortment of West India Goods, which will be sold low for cash, country produce or approved credit.

ALEX. H. HOWARD.  
Hallowell, Dec. 12, 1835. 3m46

## For Sale.

A first rate NEW MILCH COW, half Durham Short Horn, 4 years old, with a CALF by the Sturtevant Bull, so called.

DAVID McDUFFE.

Winthrop, Feb. 19, 1836.

2w3.

## Commissioners' Notice.

We having been appointed by the Hon. Judge of Probate for the County of Kennebec, to receive and examine the claims of the creditors of DANIEL O. ALLEN, late of Winthrop, in said County, deceased, whose estate is represented insolvent, give notice that six months from the 11th day of January inst., have been allowed to said creditors to bring in and prove their claims, and that we will attend the services assigned us, at the office of Seth May, in said Winthrop, on Friday, Feb. 5, 1836, from 1 to 6 o'clock, P. M. and on Friday, May 6, from 10 o'clock, A. M. to 5 P. M.

SETH MAY,

DAVID STANLEY.

Winthrop, Jan. 12, 1836.

## To the Wool Growers.

100 lbs. of WOOL TWINE just received and for sale by

JOS. G. MOODY.

Augusta, January 15, 1836.

## A Card.

The undersigned, grateful for past favors from the public, and in particular from a very civil and respectable party of friends and patrons from Winthrop the present month, takes this method to assure his friends and the public in general, that amid doubts and fears with his establishments success, he has come to the firm resolution to continue his house as a truly Temperance Tavern. If he can hereafter receive the patronage of temperance citizens, together with those who occasionally "take a little of the good creature," who with their ladies prefer a quiet temperance house to the noisy, rum-drinking tavern, he flatters himself that his sign may continue up a few years longer. But if said patronage should be largely withheld the sign can be taken down.  
CHARLES ROBBINS.

Greene, Jan'y 27, 1836.

## Notice.

The subscribers are about bringing their business to a close in this town, request all persons indebted to them to call and settle immediately.

FOGG & SYLVESTER.

Winthrop, Feb'y 9, 1836.

**Kennebec Co. Ag. Society.**

The members of the Kennebec County Agricultural Society are hereby notified that their Annual meeting will be held on WEDNESDAY the 2d day of March next, at Ten o'clock in the forenoon, at the Masonic Hall in Winthrop Village, to elect the officers of the Society for the ensuing year, and to transact such other business as may be deemed expedient.

A general attendance is requested.

WILLIAM NOYES, Rec. Sec'y.

Winthrop, Feb'y 17, 1836.

**Monmouth Academy.**

The spring term of this Institution, under the care of Mr. Whitmore, its present able and successful Preceptor, will commence the 1st Monday in March. The course of Instruction will embrace all the branches of education usually taught in well regulated Academies—and the French and Spanish Languages. There is connected with the Institution a small Chemical and Astronomical Apparatus, and Lectures on these sciences may be expected as often as circumstances will permit. The morals and manners of the Students will be carefully attended to.

Mr. Whitmore has fully answered the expectations of the Trustees—and the approbation of the public has been manifested by a liberal share of patronage. The Trustees hoping to continue this patronage, would recommend Mr. W. as being a gentleman of superior talents and eminently qualified to discharge the duties of his situation.

Board may be obtained on reasonable terms.

NEHEMIAH PIERCE, Sec'y.

February 13, 1836.

SUBSCRIBERS TO THE FARMER can have their vols. bound by leaving them at this office

## Poetry.

## The Egyptian Maiden.

The oldest of historians records a very beautiful custom common among the damsels of Egypt.—They would go out at night-fall to the damp banks of the Nile to watch their little floating lamps as they glided upon the bosom of its waters, at the same time chanting hymns of love to the appropriate goddess of the ceremony. If the light was extinguished, they departed in tears, to indulge the lonely sorrow of Jephtha's daughter, when she called on the virgins of Mizpeh to lament, that her footsteps should no longer be seen upon the mountains, nor her voice be heard among the stately maids of Judah. If it passed down the tide glimmering fainter and fainter till lost in the distance, they returned with songs and gladness, for they then knew that their lovers were faithful in their absence to their early vows.

Sunset had thrown its latest smile  
On the blue waters of the Nile,  
And when the evening star appear'd,  
Woman's low, trembling voice was heard;  
Then came a dark-eyed maid to prove,  
With beating heart, the lore of love.

She came to try a powerful spell,  
The strength of plighted vows can tell;  
Her burning lamp, with odours fill'd,  
And extracts, from fair flowers distill'd,  
Slow, to the eddying stream she gave,  
Then sung to her who rules the wave.

"Float on, float on, my token light,  
Nor heed the cold, damp dews of night;  
Float on, float on, with conscious flame,  
Trace every letter of my name,  
That he may know, to whom you glide,  
Who placed you on the fickle tide;  
Hear, Goddess, hear, behold my tears,  
Thou knowest all a maiden's fears.

"Keep the storm-spirit from its path,  
Too weak to meet the tempest's wrath;  
O! guard it from the wild bird's wing,  
Too weak to meet the breath of spring;  
Hope lingers till that feeble ray  
Fades from my aching sight away,  
Then, Goddess, hear, behold my tears,  
Thou knowest all a maiden's fears."

The distant torch seem'd sinking now,  
She dash'd the green wreath from her brow;  
It gleam'd again—then came the flush  
That mantled in young love's first blush,  
And ever as it rose or fell,  
Answer'd her throbbing bosom's swell.

Slowly it pass'd beyond her ken,  
She stood in speechless rapture then,  
Her only voice—the sigh of bliss,  
Brought to her cheek her lover's kiss,  
And there they knelt—love's records tell,  
And bless'd the Goddess, and the spell.

## Miscellany.

## Considerations for Young Men.

## LETTER X.

To the youthful aspirant, whose anticipations are glowing with the prospect of wealth, I have additional remarks to offer. I do not approach you with a stern demeanor, as if intending harshly to upbraid you; nor with the moroseness of one who has himself felt the passion you feel and found his hopes disappointed. I am neither magisterial nor misanthropic. I have not strongly desired riches nor have I, of course, been disappointed in their pursuit. I am not one who thinks lightly of wealth when viewed in relation to this life; nor am I of that number who, unblest with it, decry it in the possession of another. I would not take from the sons of Croesus their bed of down and place under them a pallet of straw, nor disrobe their edifices of beauty, and send them to inhabit the hovel.

Even luxury, viewed in some respects, is useful. But you should remember that, too often, the person reposing in luxury prevents the gifts of Providence, and makes it less impossible that a camel should go through a needle's eye, than that his pampered and polluted soul should enter the kingdom of heaven. It is not because he is rich that

we censure him, but because his riches are abused, and thus made the means of his ruin. It is not his splendid establishment that we do condemn, but his making it the object of his supreme delight.

Riches are the gifts of God. It is Heaven's blessing that makes exertion in any lawful pursuit successful; and it is heaven's appointment when property, accumulated through the exertions of a parent descends, by inheritance, to his offspring. The evil does not lie in the riches, but in him who perverts them.

I do not believe that wealth contributes nothing to our felicity. It does not indeed add to it, when sought with unhallowed motives, secured by dishonorable means or spent in riotous living. It does not, when it produces a penurious and miserly habit; then indeed it will prove the 'gold that shall canker,' and the 'rust that shall eat our flesh.' Yet, who can deny that property obtained by honorable means, or patient industry, contributes to the enjoyment of its possessor? Who will deny that, when sought as the means of usefulness, and appropriated to object of charity, or employed as incitements to religious or literary improvement, it conveys no satisfaction to the soul? The great mistake lies in the wrong motive with which it is acquired, and the improper uses to which it is applied.

You doubtless aspire to the possession of riches, especially if you are placed by Providence in circumstances to warrant their anticipation. In analyzing your feelings on this subject, do you find that you desire wealth for its own sake? Are your efforts prompted by the mere love of money? Do you follow the pursuit of riches as the supreme and all-absorbing business of the soul? Does it occupy your waking thoughts and your midnight dreams? Has it taken such a hold upon the inner man as to crowd out and crush down every subject which relates to your immortal destiny? Are your anticipations clinging to lucre and to the pleasures which it will purchase? Do you view it or them as the greatest good. If so, you are not only a candidate for disappointment in the possession, but you will be criminal, deeply, dreadfully criminal, in the pursuit.

Riches sought as the highest good, will not cannot, satisfy the soul. He whose inspiration gave it understanding, who intended it for higher pursuits, and a nobler portion, will not permit it. The very possession of wealth would, under such circumstances, become a punishment. If you will make to yourself a golden idol, Jehovah may leave you to be joined forever to it.—You may cry to it in your affliction, but it will have no ears to hear. You may call upon it in your dying hour, but it will have no power to commiserate. You may invoke its aid, but it will put forth no hand to rescue.

It is highly important that you should learn to moderate your expectations of worldly prosperity. I do not wish you to become inactive in business or indifferent to the increase of your possessions; but I exhort you to look upon wealth as less, far less desirable than the inheritance which is 'laid up in heaven.' View it as the means of rational enjoyment and extensive usefulness; and while you are 'diligent in business,' be also 'fervent in spirit, serving the Lord.'

If your parents or guardians have inculcated a different course, if they have sent you on the mere pursuit of this world's treasures, let me entreat you to pause, and inquire whether the course they have presented are such as God approves. Let me beseech you to examine the principles which govern you, and to estimate the wealth of this world by the bright rewards of another. I would direct you to that book where just calculations are made, and where you will find a scale in which you may weigh the happiness of the world, with the hopes and prospects of heaven.

You know, young man, that youth must soon be succeeded by old age. You know that the anticipations of youth must soon be followed by satiety, and at last by incapacity to enjoy. You know too that old age is almost coincident with death. From that point, look at the world? Suppose you should have gained a large share of its treasures, must they not then terminate forever? And if, after death, there be no enjoyments of sense; if, then all will be spirit, all thought; and if thought and spirit have no better portion than that gathered from the treasures and delights of earth; what will be your eternity; where will be your soul?

American Magazine  
of Useful and entertaining Knowledge.  
VOL. II.

Published by the Boston Beewick Company—  
No. 47, Court Street.

THE Publishers are encouraged by the flattering reception and extensive circulation of the Magazine for the year past, to prosecute it with renewed assiduity; and with a constant desire to fulfil the promises made in the outset of the work. We intend "to stick to our text;" and to serve those who have so liberally cheered us with their kind patronage, with what is useful and pleasant. The UTILE ET DULCE shall still be our aim and object. We do not presume to instruct the veteran and erudite scholar, who has spent thirty or forty years in his study,—nor to lay open those hidden mysteries of nature which have escaped the ken of the most inquisitive. Nor do we expect to approach so near to the moon or other planets, as to tell what are the trees, the birds, and animals which many these grow, or live and move. We leave such extraordinary feats to those who are more visionary or more daring than we are. But we hope and intend to keep up the character and spirit of the Magazine, in presenting solid and useful articles, which may be instructive to a portion of readers, and not considered wholly unimportant to literary men. We consider the whole United States as our field, though not ours exclusively; and we ask the favor of persons of taste and science, to communicate important facts, and natural scenes, and words of art, for the benefit of all our friends. As republicans, we feel that we are of the same family as those in the south and in the west—as friends of improvement, of good morals and good learning, we wish also to be considered of the same family. If we can do any thing by our labors to increase and strengthen this sentiment and feeling, "we shall be ready to the good work."

We would call the attention of our present subscribers to the terms of the Magazine, and to the notice in the last number relating to the subject. It is very important to us to know who propose to continue taking the Magazine, and to receive the very small sum, (\$2,) charged for it in advance.

All letters and communications from Agents and others MUST BE POST PAID.

The Postage on this Magazine as established by law, is 4 1-2 cts for 100 miles—any distance over, 7 1-2 cts.

GEORGE G. SMITH, Agent.

Boston, September, 1835.

## Celebrated Horse Powder.

THE various diseases to which the HORSE is subject, have occasioned many remedies to be offered to the public, under different forms with high ecomiums. Some of these are injurious,—others at best, of little use. A judicious and useful combination has long been desired. This is recommended in the following cases:

For Horses foundered by eating to excess, or drinking cold water when warm, to such as discover any symptoms of Glanders, the Distemper, Cough and Yellow Water, or are exposed to infection by being with other Horses affected with these complaints, and in all cases attended with feverish symptoms, sluggishness, loss of appetite or depression of spirits.

The dose for a sick Horse is one table-spoonful night and morning, mixed with a light mess of short feed, or made into a drench: when intended to keep a Horse in health, a table-spoonful once a week will be sufficient, and at the same time a table-spoonful of Salts in his food.

Prepared and sold by JAMES BOWMAN, Gardiner, Maine.

We the undersigned having examined the Recipe for making the Horse Powder prepared by James Bowman of Gardiner, Me., do not hesitate to say it is a scientific combination, and from experience and observation we are persuaded to say that it is a good preparation for many diseases of Horses for which it is recommended.

D. NEAL,

D. H. MIRICK.

We the subscribers having made use of the Horse Powders prepared by James Bowman, Gardiner, Maine, most cheerfully recommend them to the public for Distemper and Coughs.

CHARLES SAGER,

A. T. PERKINS,

J. D. GARDINER,

SAMUEL HODGDON, Pittston.

BENJ. HODGES,

JOHN H. ELDRIDGE } Augusta.

— A L S O —

THE Genuine "ROLLINS' IMPROVED LINIMENT" for Horses and Oxen, and even for Persons afflicted with Rheumatism, Strains, Sprains or chilblains—it is not second to any other Liniment, British Oil or Opodeldoc now in use. *tf.*